What the invention claimed is:

1. An air temperature exchanger mounted inside and made an integral part of a pipeline connecting both cold and hot coils inside an air condition system, essentially comprised of a baseboard sandwiched by a cold conductor and a hot conductor having its both sides contacting and bounded respectively to a contact surface from two units of contact boards connected in between multiple of crystals; wherein, said contact surfaces creating a temperature difference, ΔT, with one contact surface dissipating heat and the other cooling down the air temperature; and said conductor containing liquid having a water inlet at the top and a water outlet at the bottom with both connecting to a cold coil and a hot coil to form respectively a closed loop for the liquid circulation driven by a corresponding pump.

2. An air temperature exchanger as claimed in Claim 1, wherein, said multiple crystals provided between two contact surfaces include elements of Sb, Bi and other elements connected in sequence with a positive electrode from a crystal to a negative electrode from an abutted crystal.

3. An air temperature exchanger as claimed in Claim 1, within, three sides other than the side bound to the baseboard of the hot conductor are integrated with multiple fins for heat dissipation purpose and arranged in parallel at equal spacing adapted to a fan to improved heat dissipation efficiency of the hot conductor.